

Remarks

Further and favorable reconsideration is respectfully requested in view of the foregoing amendments and following remarks.

Thus, each of claims 1 and 12, which are the only independent claims under consideration, has been amended to restrict the non-woven fabric to a single layer, which is supported by the disclosure at page 15, lines 17-22 of the specification.

The patentability of the presently claimed invention over the disclosure of the reference relied upon by the Examiner in rejecting the claims will be apparent upon consideration of the following remarks.

Thus, the rejection of claims 1-3, 6-8, 12-14 and 17-19 under 35 U.S.C. §103(a) as being unpatentable over Shinjou et al. is respectfully traversed.

As explained in paragraphs [0002] and [0003] on pages 1 and 2 of the present specification, a support having a laminated double layered structure (employed by Shinjou et al.) has a disadvantage in its production cost and complexity. In contrast, a single layered structure as defined in amended claims 1 and 12 has superior advantages of lower cost and simplicity in its manufacturing. Also the single layered structure is free from a delamination problem associated with the double layered structure.

Thus, the Shinjou et al. reference discloses only a double laminated layered structure, i.e., as described in "SUMMARY OF THE INVENTION" in column 2, beginning at line 40, stating:

The non-woven fabric has a combined laminated double layered structure which comprises a low density layer with an air permeability of 5 to 50 cc/cm² /sec and a high density layer with an air permeability of 0.1 cc/cm² /sec or more and less than 5 cc/cm² /sec. (Emphasis added)

and more specifically, Example 1 at column 6, line 16 stating:

A web...were blended, opened, and cross-laid with a cross-laier[layer] so that the fibers were oriented into the transverse direction, was laminated as the low density layer on the sheet. (Emphasis added)

By using such a special configuration of a double layer in which one fiber direction crosses in the transverse direction over the underlayer such that the fibers are crossing each other, its tension in multi-directions (such as orthogonal directions) are accordingly maintained at a high level.

In contrast, amended claims 1 and 12 of the present application employ a simplified single layer structure, which therefore can be manufactured at lower cost by an easier process.

In addition, Shinjou et al. explicitly exclude such a single layer configuration. In REFERENCE EXAMPLE 2 at column 7, the reference states:

A single layered support of 170 g/m² was prepared...it was observed that the *penetrativity was insufficient. Partial delamination occurred between the membrane and support, and many pin-holes were generated.* (Emphasis added)

Since Shinjou et al. teach that the single layered structure showed an inferior result, the skilled person in the art would not employ such an inferior configuration relying upon the reference teaching. Therefore, one of ordinary skill in the art would not be motivated to employ a single layer structure instead of a double layer structure, and in fact, Shinjou et al. actually teach away from such a modification.


On the other hand, in contrast to the expectation which one of ordinary skill in the art would obtain from the Shinjou et al. reference, excellent results can be achieved when employing a single layer structure in accordance with the present invention, as apparent from the results set forth in the working examples and comparative examples in the present specification.

For these reasons, Applicants take the position that the presently claimed invention is clearly patentable over the applied reference.

Therefore, in view of the foregoing amendments and remarks, it is submitted that the ground of rejection set forth by the Examiner has been overcome, and that the application is in condition for allowance. Such allowance is solicited.

Respectfully submitted,

Yoshitsugu HAMA et al.

By: 
Amy Pulliam
Registration No. 55,965 *for*
Michael R. Davis
Registration No. 25,134
Attorney for Applicants

MRD/pth
Washington, D.C. 20006-1021
Telephone (202) 721-8200
Facsimile (202) 721-8250
April 6, 2004